

University of California Santa Cruz

Anthropology Undergraduate Thesis

The Geo-Legal History of the Kabarra Wetland

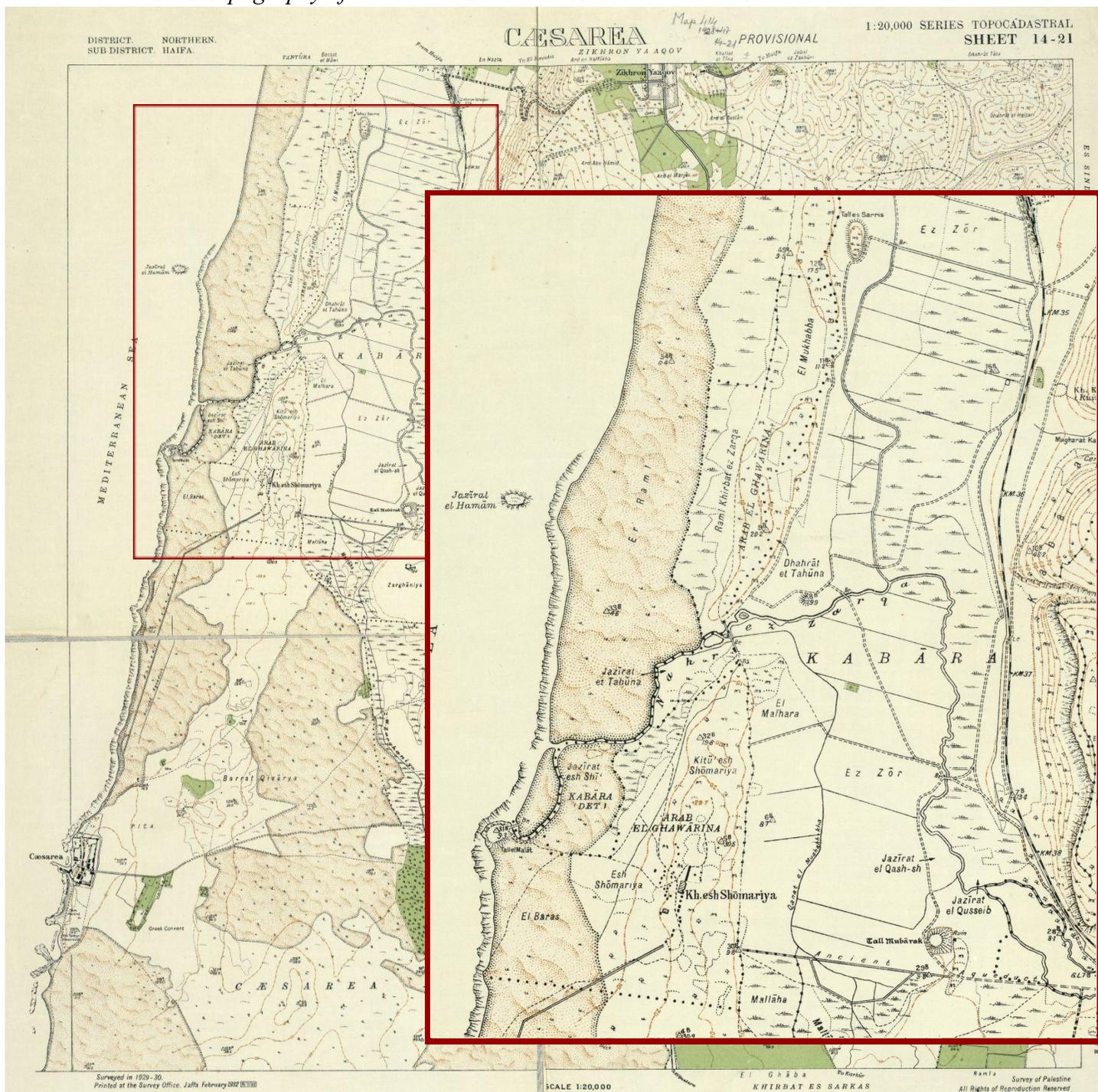
& al-Gawarna People in Israel/Palestine

Under the tutelage of Professors Anna Tsing & Andrew Mathews

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1932 Topography of Caesarea – Zoom on “Kabara Wetlands/Arab el-Ghawarina Lands”



REFERENCE			
International Boundary	Road Metalled	Isolated Building	Citrus Grove
District Boundary	Road Unmetalled	Bushes	Banana Grove
Sub-District Boundary	Railway, Standard Gauge	Cropping Rock	Olive Grove
Municipal, T.P. & Quarter Bdy.	Railway, Narrow Gauge	Quarry	Orchard (fruit)
Village Boundary	Track	Minaret, Sheikh-Tomb	Vineyard
Fiscal Block Bdy.	Bridge	Threshing Floor, Pumping Engines, Lime Kiln	Coniferous Plantation
Wall, Hedge, Fence, Canal, Ditch &c.	Slope	Well, Cistern, Spring, Water Tower	Other Plantations
Undefined Limit	Limit of Sand	Palm	
Symbol shewing change of Bdy.	Cliff	Coniferous	
	Uncultivated Land	Other Trees	
	Marsh	Sand Dunes	
	Contours		

Jisr al-Zarqa (English: Blue Bridge) is home for 16,00 people on 1.5 square kilometers of land constituting the last remaining Palestinian coastal town since the 1948 formation of the state of Israel. Its inhabitants are the descendants of two semi-nomadic Bedouin groups that lived in the Kabarra Zor (Arabic for swamp). Their histories and modern political ecologies should not be confused. The first group was known as Arab al-Kabarra of Tantura – the presently occupied Palestinian fishing village by the ancient ruins of the Phoenician city of Dor. The second group was called Arab al-Gawarna (literally “Valley Dwellers”), who lived between Tantura and Barat Qasariya – the city that Herod built for Cesar in 100 CE. The names of the two groups are renditions of colonial officials’ attempts at categorizing groups of immigrants who came to Palestine during the Egyptian Occupation in the 1830s and settled in wetland areas (Karmon 1953-4; Shafir 1996; Tyler 1994)

The Kabarra wetlands stretched across 13,000 dunams (or 13 square kilometers) and held various ecologies: sand dunes shifting from Qasariya along the northern coast, rocky hillside half a kilometer inland parallel to the shore, the Zarqa river cutting through the sand dunes and stony hills on its way to the Mediterranean Sea, and the wetland that saturated the landscape from the sea to the foothills of the Samaria mountain range. When the Kabarra wetlands would flood in the winter, its inhabitants would move to higher grounds. Jisr al-Zarqa sits today, twenty miles south of Haifa, where the Bedouin groups spent their winters.

The lives of Bedouin al-Kabarra and al-Gawarna have changed immensely. Unlike other Arab towns and villages in Israel, Jisr’s Naqba took place in the 1920s and is still ongoing in various ways. A 1963 official ethnographic survey of Jisr’s inhabitants by the state was the first to record the oral histories of Jisr’s inhabitants, who described a lush landscape and lifestyle prior to their “Western improvement.” Led by Western industrialization of the region, intensive

agricultural and aquacultural economies have rid Israel's last Arab coastal town and the surrounding landscape of its biodiversity.

In this paper, I explore the intersection of the natural, legal and political histories of Jisr al-Zarqa and the Kabarra wetlands in an effort to understand how the land and the people living on and of it have changed under different interests, people, regimes, and empires. More specifically, I describe how the various Ottoman, Mandatory, and Israeli legal systems defined wetlands in order to engender specific economic productivity that supported a set few and led to a once biodiverse hotspot on the northern coastal plain of Palestine becoming one of the most endangered ecologies in the world.

Under the Ottoman Empire

Following the Crimean War (1853-1856), the Ottoman Empire was headed towards bankruptcy. Desperate for liquidity, Sultan Abdülhamid II rearranged the political Ottoman landscape. The Ottoman Sultanate organized its landscapes with an eye to political stability and a strong tax base. Consequently, the Ottoman legal system distinguished different types of land by their potential productivity for the empire. This land, including Palestine, was structured around the different populaces that lived in the landscape.

The Ottoman Land Code of 1858 repartitioned all the land of Palestine into a mosaic of taxable land and categorized it, according to its productivity, as arable or wasteland. Approximately 832,000 dunams, which later became 2% of Mandate Palestine, were categorized by the new code as *Mawat*, or wasteland, and were consolidated under the new land code as the sultan's property (Frantzman & Kark 2011). These *Mawat* lands included "rocky places, stony fields, and grazing grounds that were not in the possession of anyone by title-deed nor assigned to the use of inhabitants of a town or village." The new land code also instated the Sultan's right

to appropriate any private land that had not been settled on or cultivated for several years, and sell it to other landowners (effendis) from Palestine and elsewhere in the Middle East.

Due to the weakening of the Ottoman empire through war and debt, the powers of the Sultanate did not suffice to sedentarize the powerful Bedouin tribes that lived throughout Palestine. The sultanate attempted to restrict the movement of the Bedouin tribes by legally endowing them with portions of public land defined as *Matruka*, a category that was designed to protect public or community land uses from private or state control (Ottoman Land Code of 1858, Articles 91-110); but the Bedouins did not abide by them. In many cases, they proceeded to sell their titles to effendis while continuing to live among the lands (Shepherd 1999). One such case was Tantura, where the Arab al-Kabarra resided.

Early British Mandate

After World War I, the British Mandate (1919-1948) took over the stately efforts to sedentize the nomadic Bedouin population and develop the land. Where the Ottoman empire saw the wetlands as acceptable, though less productive, regions to tether the Bedouins to, the British Empire sought to drain the marshes and swamps along the coast and valleys of Palestine. Their vision sat within a larger global initiative, as wetland drainage was a signature colonial project across the world from the 18th to 20th centuries for colonialists who sought to cultivate agricultural and industrial landscapes.

The different logics of the Ottoman and the British empires required a shift in legal labels to justify the British Mandates' land development. The Mandatory administration depicted their rule over Palestine as maintaining the status quo as much as possible. This meant that discussions of local land rights had to be grounded in Ottoman law, in conjunction with British colonial law.

Well versed in the creation and deployment of colonial law, the British mandate authorities attempted to redefine critical terms at the crossover between Ottoman and British land laws in order to better suit their development policies. In the absence of Ottoman officials who could expand on their legal norms and conventions, significant translation and interpretation were called for. According to Forman and Kedar's 2003 article "Colonialism, Colonization, and Land Law in Mandate Palestine," this gave Mandate legal officials a great deal of discretion in clarifying the meaning of property in line with their colonial policies (p. 520).

Among the Ottoman legal land categories, *Mawat* – a land that had not been cultivated or lived upon - was the easiest to appropriate. According to Ottoman law, any person who revived *Mawat* by bringing it under cultivation would thereby acquire the rights to own it (Ottoman Land Code of 1858, Article 103). However, the coastal wetlands that the Mandate sought to drain were categorized as *Matruka*. *Matruka* land was not private, yet it was outside of state control and was recognized by the Ottoman authorities as pastoral habitat for many Bedouin peoples and their grazing herds. Such was also the case of the Kabarra wetlands that served as the habitat for the Gawarna people and their water buffalo herds that grazed on the aquatic plants and peripheral grasses. Categorized as *Matruka*, the Kabarra wetlands seemed to be out of reach for the British officials, who were legally permitted to appropriate only *Mawat* land for development.

It is important to mention that, to the Bedouin of the Kabarra, these lands were not wastelands. At the onset of British rule in Palestine, the 79 families (approximately 400 people) that comprised the Arab al-Gawarna sourced their livelihoods from the wetland. Said livelihood consisted of herding water buffalos that provided hides and dairy products, harvesting wood from the wetland brush and trees that grew between the rocky hills, and weaving the local samar and papyrus plants into reed baskets and mats. The specific group that resided in the Kabarra

consisted of 13 families that raised livestock too, along with cultivating plots of cereal and vegetables along the rim of the sand dunes and marshland. Whatever they did not use, they sold or exchanged with other tribes and Palestinian localities throughout the region (Nadan 2003, 325).

Al-Gawarna's economy was carefully calibrated to the cycle of floods each summer and spring. They had evolved small-scale local entanglements that allowed them to live and foster a livelihood from the waters until large-scale state "improvement" came along. It is easy to overlook the evidence of resourcefulness and ingenuity that was tossed aside by "technological hubris married to state power" (Blackbourn 2006, 66). There was something more than their livelihoods that was lost to the reclamation of the wetlands by state powers.

The conquest of Palestine's nature provided new grounds for a fresh new conflict. The local inhabitants of the wetlands refused to willingly relinquish their livelihoods and ontology that were intimately entangled with the wetlands' ecology to the political ambitions of their new rulers. At this point, two significant gaps in the British Mandate's vision of intensive production from the land's fertile soil prevented them from claiming and working wetlands. The first was a lack of context or experience in Palestine, and the second was the tools to change it. Both challenges would shift as a new population of settlers entered the British Mandate.

Zionist Vision

Arabs who sold their lands prior to Zionization did so mostly to moneylenders or effendis that allowed them to stay on the land and independently own their crops and harvest.¹ However,

¹ PRO/CO/733/290/8, February 1933, Secret, Cabinet, "Policy in Palestine: Memorandum by the Secretary of State for the Colonies" cited by Amos Nadan 2003 in *Journal of the Economic and Social History of the Orient*, 2003, Vol. 46, No. 3 (2003), pp. 320-354 titled "Colonial Misunderstanding of an Efficient Peasant Institution -- Land Settlement and Mushā Tenure in Mandate Palestine 1921-47" p. 346-347

Zionist policy not only acquired ownership of the lands, it also ensured that all the labor required on the land would be carried out by Jews only. The result of this policy was a growing body of ‘landless’ Arabs. Bedouin al-Gawarna were an exceptional case. In order to drain the wetlands, their expertise on the hydrology of the Kabarra was necessary in order to successfully drain it.

The immigration of Zionists into Palestine generated a double vision of a utopic promised land and came face to face with an Indigenous land that they did wish to live alongside. Escalation of trauma and national identity fueled a form of Zionism that set out to frame the new Jewish national identity onto the landscape. The enlightened visions of a landscape of Milk and Honey² collided with a landscape that required significant labor and knowledge to construct. Zionists came into Palestine wishing to prove their worth against the institutions that disallowed them agency for their economic development and societal actualization in Europe.

As swathes of land were recognized by European officials as *Mawat* or *Matruka*, the dynamic landscapes in which Bedouin lived came under the mounting pressures of British and Zionist land acquisition and industrial interest. The Zionist organizations, in particular, mounted pressure on the Mandate authorities to settle as much land as possible. Paired with the surveying techniques and drainage technologies of the time, the coastal plain and the valleys were the most accessible to new settlements. The coastal plain, in particular, was in high demand due to its high water table that could support intensive farming of cash crops that required heavy irrigation.

Progress was slow because the coastal land market was expensive and fractured, but the groundwater of the plains remained a major incentive for the Zionist intensive agricultural imaginaries. Those with means purchased coastal land that was already plotted, while the settlers with little funds, who composed the majority of the initial waves of settlers coming to Palestine,

² In the Old Testament, God repeatedly describes the Promised Land as “a land flowing with milk and honey” (Exodus 3:8; Numbers 14:8; Deuteronomy 31:20; Ezekiel 20:15).

sought wastelands, *Mawats*, to overcome and settle in along the coast.³ According to Amos Nadan's 2003 research on "Colonial Misunderstandings of an Efficient Peasant Institution," the changes introduced into the Ottoman-to-Mandatory land policies allowed the accelerated transference of Arab land into Zionist hands without significant changes in investment for settled villages.

The *Mawat*-labeled lands posed challenges to the settlers who sought to solve them with Western tactics. The factory and field workers from Zichron Ya'akov, a colony established in the early 1880s by one hundred Jewish refugees, were the first among several Jewish colonies that introduced the demand for the drainage of the Kabarra wetlands. The British High Commissioner conceived of the drainage of this land "infested with Malaria," as both a state-building and a public health project.⁴ Malaria was the quintessential environmental affliction of the nineteenth century, and reports from the colonial front were saturated with proposals to drain wastelands that housed the *Anopheles* mosquito, the dreaded vector for the *Plasmodium* parasite species that causes malaria.

It was evident to some members of the Mandate that although the draining of the marshes was pitched as a benefit of the public as a whole, a significant portion of the public that were living in and directly affected by the drainage of the wetlands were the Indigenous Arabs. Their presence in the wetland was preceded by ancestors who had lived there for generations without the need to change the environment. In this case, al-Gawarna's people would have no inherent need for the draining of the land. The Colonial Secretary sent a letter to High Commissioner

³ Prior to the first wave of European Jewry that had escaped the pogroms in eastern Europe, only 25,000 Jewish people were living in Palestine. They constituted about ten percent of the Palestinian population. From the 18th to 20th centuries, the emancipation of Jews in various European nations exacerbated anti-Semitism. A rise in pogroms and violence against Eastern European Jewry instigated a rise in transoceanic Jewish migrants who sought refuge, mostly in North America, while three percent came to Ottoman-ruled Palestine. Prior to World War I, of the 2,367,000 Jews who left Europe due to the pogroms, 2,022,000 established new homes in the US while 20,000 to 30,000 came to Palestine.

Herbert Samuel that the draining of the swamps was for “a comparatively small portion of the public” in and around the vicinity of the swamp (Devonshire 1923).

The trials that preceded were widely known and referred to as land concessions to the PJCA and other Zionist organizations who used the Mandatory courts and ideas of the public and wastelands as geopolitical weapons for appropriating Palestinian lands. Health concerns with the physical pressure of Jewish settlers along the borders of the local Gawarna populations, the Gawarna people had little choice.

The Trials

Forman and Kedar describe in great detail the legal battle for defining the Kabarra wetlands and therefore the rights of Arab al-Gawarna to the land. The Mandate legal system became an important site of indigenous struggle and resistance. Wadi al-Boustany was the lawyer for the Gawarna, and employed colonial legalities in negotiation for their indigenous rights with Mandate authorities, as well as with Jewish colonization activists. Western terminologies of the public and moral rights were used in Mandatory Law and Zionist. The Mandate courts used the materiality and temporality of al-Gawarna’s reed tents to reify state politics incentives by not considering al-Gawarna’s tents as a real “village,” and therefore not a part of the public. This would make the *Maturka* public lands of the Gawarna actually *Mawat* under the Mandatory courts, and therefore fair game for development. Al-Boustany insisted that these scrutinies were irrelevant, and what was relevant, as far as Ottoman Land Codes were concerned, was whether the community was sedentarized. In order to prove they were sedentary during the trials, the Gawarna rebuilt some of their winter encampments with mortar and stone

(529). For the rest of the wetland, the Attorney General insisted that the infrastructures of al-Gawarna's homes were materially nomadic, and therefore did not constitute a public space.

Before the Attorney General passed the right of eminent domain to expropriate the *Mawat* "private" land for "public" use, Jewish settlers had already begun to move in and block the entry of al-Gawarna from parceled lands. The threat of force and preemptive draining had succeeded in displacing the Gawarna westward to a 1.6-acre sandstone ridge on the ruins of the Roman rock quarry that was near their highground winter encampments. The Mandate authorized the concession of the Kabarra's 6,000 dunams but stipulated that 2,500 dunams of rocky quarry lands will be set aside for the local people. The agreement transformed the wetland and the identity of the landscape and al-Gawarna people. They were placed on their historical winter home on a 1,200 dunam stretch of rocky and unarable land above the old Roman quarry that supplied the stone walls of Caesarea. The Gawarna people labored for Israel's terraforming of wastelands, yet remained in the wastelands of past empires.

Clay in the Sun

The Kabarra wetland was drained between 1922 and 1932 as one of the largest Zionist projects in Palestine, second only to the draining of the Hula Valley to the north. The drainage was accomplished by crisscrossing the swamp with a network of clay pipes. The pipes were envisioned to be manufactured beside the draining grounds using the clay extracted from the swamp. Baron de Rothschild had invested in the clay pipe factory but failed to produce the pipes, so instead he had them imported from France. Fifty kilometers of pipes capped 3,000 springs and directed their flow into the Crocodile Creek, which was widened to support the increased volume of spring water (National Parks and Nature Reserves). The immense labor that this project

required was borne through the hundreds of al-Gawarna people who were hired to clear crops and dig the mud in which the pipes would be laid. After its drainage, the Kabarra wetland's peripheries were settled by PJCA-affiliated colonies: Zichron Ya'akov, Ma'ayan Tzvi (1938, adjacent to Zichron Ya'akov), and Sedot Yam (1940, just south of Caesarea).

The Indigenous groups of the Kabarra wetlands were the only regional Palestinians that reached an agreement with the PJCA in 1928, twenty years prior to the 1948 War (Independence Day for Israel, and the Great Catastrophe "*al-Naqba*" for Palestinians). By staying, al-Gawarna people became the laborers and informants necessary to drain the wetland alongside Jewish landscape engineers and technology. Al-Gawarna's progeny remained on the rocky hillsides beside the coast due to the stone houses that constituted a homeplace that historically sheltered them during the winter high tides that flooded the surrounding landscape. Their permeable reed encampments had to be replaced with stones and mortar. Their buffalo herds were exchanged for dairy cows. Their labor in draining the swamps allowed them to remain on their designated lands when the Naqba of 1948 happened, but the hydrology of the wetlands that shaped their livelihoods and identity were rerouted to infrastructures of different interests.



Photograph of the drainage process. Kibbutz Maagan Michael Archives

Contemporary Ecologies

In Israel, these capital-producing infrastructures and techniques are entangled with colonial relations and imperial infrastructures of time and space. Kibbutzim like Ma'agan Michael are invested in the redirected flow of the springs, the capital production of the drained wetland, and the control of the seasons through science and technology—pesticides, insecticides, fungicides, fertilizers, irrigation—that compress time and space and propagate wealth without the dependency of natural cycles.

The history of Kibbutz Ma'agan Michael roots back to the Aleph scouts movement, a group of Austrian and German Jews who immigrated to Palestine in 1942/3 on the eve of World War Two. These scouts served as underground munitions manufacturers for the Haganah (English: the defense), the main paramilitary of Zionists before Israel was established, manufacturing 9mm bullets for the Sten submachine guns that were used in the 1946-49

Independence War/Great Catastrophe. Similar to the drainage of the Rhine and Olderbruch in Germany and the subsequent displacement of fishing communities, such as fishers in Fenland, draining a wetland was done through military and state force. The benefits of progress for the state's conquering of nature was a zero-sum price to the ecologies of the wetland that were drained, and along with it were the Bedouin livelihoods and ontologies that were entangled within it.

In the late winter of 1949, the Aleph Scouts established Kibbutz Ma'agan Michael directly north of the newly expanded Crocodile Creek, on a drained wetland floor. The kibbutz stretched north for approximately four miles (6.45 sq km) and east (inland) for 1.25 miles (2 sq km), making up approximately four times the size of Jisr al-Zarqa. where about 1,400 residents internally run the industries behind private gates. Without ever entering the gates of the kibbutz, the thousands of dunams that stretch inland from Ma'agan Michael are filled with monocrop fields, dairy farms, poultry houses, fish farms, and an ornithological field school.

The largest portion of land – 1,600 dunams – are subsistence crops to feed the kibbutz's dairy herd: 300 milking cows and 200 calves who produce 3.2 million liters of milk each year. The second largest portion of land caters more towards international markets – 1,200 dunams of subtropical fruits. Cash crops, such as: avocados, bananas, papaya, and several other exotic crops have recently replaced cotton as the kibbutz's main agricultural export. 1,200 tons of bananas are grown for local markets each year. Rows of gray shaded tarps cover strawberry bushes and banana trees—plastic blue bags cover the bunches, ripening them and warding off pests. Papayas and other more exotics are grown over forty dunams in orchards nearer to the base of the Carmel Mountains, fifteen kilometers East from the Crocodile Creek.

Avocados have recently replaced cotton as Kibbutz Ma'agan Michael's cash crop, constituting over half of the market harvest. In the orchards of Tantura, 1,000 dunams of avocados are grown, mostly for consumption in Europe. What does not end up in European markets remains in Israel, which is one of the largest avocado consumers in the world. They are agricultural products that take substantial hydrologic infrastructure, time, and access to international markets in order to make profit. Water and time is what fuels avocado production, and when they are mass-produced, they become a contemporary sign of capital.

Industrial farming produces relatively short bursts of intense yields with less labor due to mechanized irrigation, high-yielding variety seeds, and chemical cocktails (Birkenholtz and Rhoads, n.d.). Mariculture supplies half of all fish on the global markets, but similarly produces wastewater with high salinity and other fish-metabolism derived pollutants (e.g., nitrogen compounds) that flow into public spaces of preservation (Perez 2021). The water flowing through the monocrop canals and fish pools mingles with fertilizers, pesticides, insecticides, fish metabolic waste, and potential disease that breeds in the pools. When the river becomes the sea, the boundaries of gridded lines and concrete pools become porous.



March 15, 2021 by Nona Golan, (from back to foreground) sea, Ma'agan Michael's fish pools, Taninim/Zarqa river, Jisr's cows grazing in a trashed field.

Along the seam of the coastline, fish farming developed into Ma'agan Michael's largest agricultural ventures. Dagon is the incorporated aquaculture branch of the kibbutz. One third of the kibbutz's youth work in this branch of the industry, compiling a total of 123 employees and \$27 million in revenue for the kibbutz. Concrete fish ponds/pools stretch along the coast for 2,400 dunams (240 hectares) north of the river. 1,400 tons of edible fish are harvested per year, including high-end market fish: Hybrid Striped bass, Sea Bream, Red Drum (Musar), Sea Bass (Levrak), Tilapia; and low-end market fish: silver carp, gray mullet, St. Peter's fish, and Barramundi fingerlings. Ornamental fish, Japanese Koi and goldfish, cap the industry's earnings.

The nearby Timsah Springs, which originates from the Taninim Stream, is one of the local sources of brackish water for the kibbutz's numerous fishponds. The fish who require seawater are likely flooded by the Mediterranean during Winter, when swells are highest, or drain water from the river during the Spring, when waters rise highest. All operations are sealed behind a closed gate, but the fishpools themselves are open to the rising river and sea.

On these lands, Ma'agan Michael became one of the largest and wealthiest kibbutzim in the state and the world. Today, their industries span four main branches and 21 subsidiaries that produce over one hundred million dollars in annual sales, 85% of which is sourced from transnational markets. This places their offices in the high-rise buildings of the Bursa (economic capital, like Wall Street), in Tel Aviv. Meanwhile, on the southern banks of the river's mouth, Jisr al-Zarqa and the fishing village are not sharing the same opportunities for income and benefit that the drained-wetland proved to offer.

Most people in Jisr al-Zarqa today work outside of the township. Since they cannot labor on their own land, they have become reproductive laborers throughout the state of Israel. Their professions as janitors and cleaners have become stereotypes to their identity writ large. Some locals pick fruit in the agricultural fields surrounding Jewish kibbutzim. Handmade papyrus art hangs in a gallery in Jisr, where Jewish women came to facilitate workshops. They were isolated from the rest of the Palestinian community for decades as the Occupation of Jewish labor policies and terraformation dissolved their social and environmental entanglements.

Conclusion

Many of the scholarly sources cited in this essay were written in colonial contexts. According to the Medical Historian Sandy Sufian, the lack of Arabic sources on the history of Palestinian communities makes research difficult (2003). Sufian points out that most "Zionists did not believe the Arab population held a strong attachment to the land; they used the existence of swamps as proof of a supposed indifference and detachment" (2007, 161). A plethora of historians and political scientists of Palestine/Israel today are breaking down these assumptions

that Arab communities cannot manage themselves, therefore necessitating the purview of the state.

Modern dialectical irresponsibilities of the Israeli state that neglect colonial histories against the Palestinian and Arab-Israeli people have been addressed by some scholars, but there is still a lack of reparations for Arab Bedouin-told who continue to be dispossessed within their historical lands. Their transitions into industrial infrastructures of empires are accounts that detail how wastelands are produced not only by untamed waters but by people, too, who have politics that discriminate and dispossess due to disparate interests. These interests are apparent by the rerouting and privatization of water in Israel, and the prioritization of the health and wealth of Zionist industries and communities till the present.

The new political ecology of Occupation in the Kabarra wetlands is visible through the rows of Jewish-owned agriculture industries aimed towards mass production for national and international markets. Many Jewish-owned fields have become sites of plantation-esque work, picked by the hands of Arab and Southeast Asian workers. The labor that is demanded from these infrastructures of capital accumulation represents global trends of mass production, constructed hydrologies, diminished biodiversity, emissions, and denigration of soil physicochemical properties. In Jisr al-Zarqa and the coastal fishing village, the dialectically unresolved imperial and colonial history should be taken under consideration by those who seek to revive the biodiversity and landscapes of public wetlands, beginning with state reparations and the repossession of Bedouin sovereignty and ecological dynamism.

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